



## **II. PARTIES**

3. Plaintiff IPT Global is a limited liability company organized and existing under the laws of the State of Texas. Its principal place of business is at 16200 Park Row Drive, Suite 350, Houston, Texas 77084.

4. Plaintiff IPT is a limited liability company organized and existing under the laws of the State of Texas. Its principal place of business is at 16200 Park Row Drive, Suite 350, Houston, Texas 77084.

5. Defendant OTC is a limited liability company organized under the laws of the State of Louisiana. OTC has a regular and established place of business located at 15990 North Barkers Landing Road, Suite 100, Houston, Texas 77079. OTC may be served with process by serving its agent for service of process, Northwest Registered Agent, LLC, 5900 Balcones Drive, Suite 100, Austin, Texas 78731.

## **III. JURISDICTION AND VENUE**

6. This action states claims arising under the patent laws of the United States, 35 U.S.C. § 101 *et seq.* Plaintiffs IPT Global and IPT assert a cause of action against Defendant OTC for patent infringement under 35 U.S.C. § 271. This Court has original and exclusive subject matter jurisdiction over this claim pursuant to 28 U.S.C. § 1338(a).

7. Defendant OTC is subject to general personal jurisdiction in this Court because it has established systematic and continuous contacts with the State of Texas sufficient to subject it to general personal jurisdiction in Texas. Defendant OTC is further subject to specific personal jurisdiction in this action because Plaintiffs' claim for patent infringement arises from and/or relates to sufficient minimum contacts which OTC has purposefully established with the

State of Texas. This Court's exercise of personal jurisdiction over OTC would not offend traditional notions of fair play and substantial justice.

8. Venue for Plaintiffs IPT Global and IPT's claim for patent infringement is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because OTC has committed acts of infringement in this district and because it has a regular and established place of business in this district.

#### **IV. FACTUAL BACKGROUND**

9. This proceeding is a patent infringement lawsuit brought by Plaintiffs IPT Global and IPT against Defendant OTC for infringement of Plaintiffs' novel systems and methods for testing the integrity of pressure systems, as claimed in the '143 patent.

10. Plaintiff IPT Global is a worldwide leader in digital pressure testing, including pressure testing of well control systems such as blowout preventers (BOPs). IPT Global was established in 2008 and its employees and inventors have since been awarded 13 patents on its pressure testing inventions. IPT Global practices the systems and methods claimed by the '143 patent, including by using its SureTec<sup>®</sup> suite of digital pressure testing products.

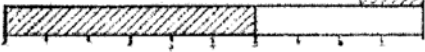
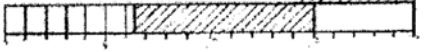
11. Much of the equipment used in the oilfield industry must be capable of safely handling high pressure fluids. Familiar examples include blowout preventers, mud systems, hydraulic systems, high pressure air systems, and injection systems. By way of example, a BOP stack positioned on a wellhead or riser is often required to safely handle pressures well over 5,000 psi.

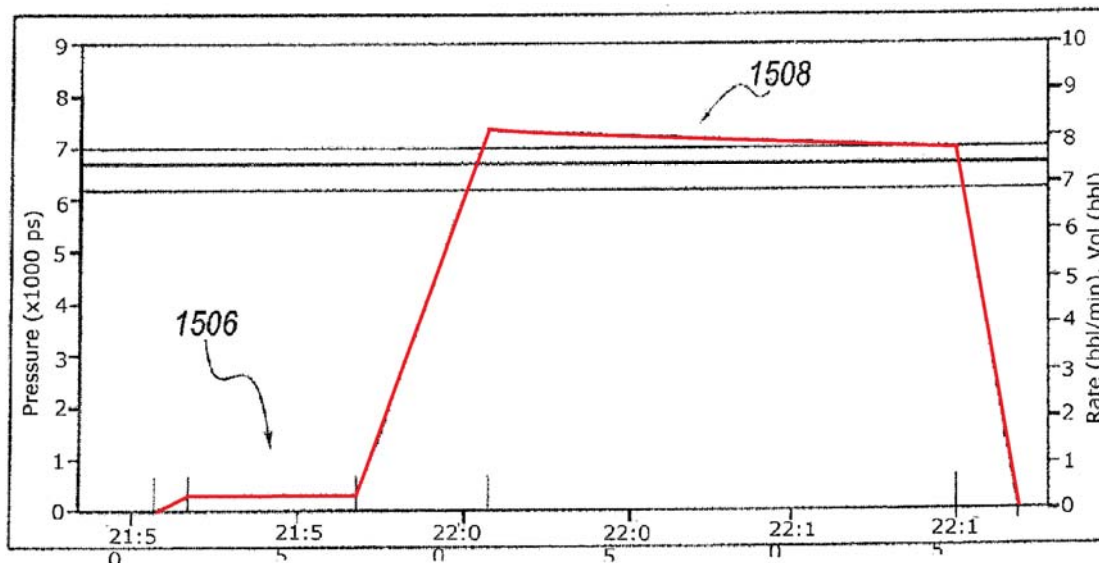
12. These pressure systems and the individual components that comprise the systems, e.g., valves, piping, and seals, are periodically tested to ensure that the system is

capable of safely maintaining the expected pressures. To perform these tests, the operator will often isolate different portions of the system and then subject the isolated portion of the system to a test pressure. The test pressures within these isolated portions are then sampled over a period time often ranging from 10 minutes to over an hour. In addition, many of these tests may need to be repeated several times in order to rule out other factors that may affect the test results. As a result, this testing may require a significant time commitment, e.g., 12 to 24 hours, which can become very expensive when the daily rental rate for a drilling rig may approach \$1,000,000 per day.

13. These challenges with conventional pressure testing methods led IPT Global to discover computer implemented pressure testing methods and systems that can safely and accurately determine whether a pressure system being tested would achieve a steady state pressure within the applicable time limit. In brief overview, the pressure in the system is periodically sampled over time and the resulting curve of pressure versus time is compared to a benchmark pressure response when then the system is performing properly. If the tested response correlates closely to the benchmark response, the test is considered a passing test. This determination whether a system will hold a minimum steady state pressure can often be made on a computer system much quicker than previous manual methods. This discovery led to the development of the leak detection systems and methods described and claimed in the '143 patent.

14. A report of testing from the '143 patent is reproduced below with portions highlighted in red. A low pressure test of a BOP that failed testing is depicted in the pressure graph labeled 1504 in Figure 18 from the '143 patent.

TEST EXECUTION SUMMARY			TEST REPORT	
BOP 3			<input checked="" type="checkbox"/>	
DESCRIPTION B8				
System S1	Benchmark BOP	Test PSI 6.800		
Low Pressure		High Pressure		
Time Held: 00:05:45	Final PSI: 256	Time Held: 00:05:45	Final PSI: 6.980	
				
Time Held:	Final PSI:	Time Held:	Final PSI:	
Low Pressure Failed		No Data Available		

**FIG. 18**

15. Another aspect of IPT Global's patented digital pressure testing inventions is the creation of a schematic illustration of the pressure system to be tested. Well control systems often include several BOPs with rams or annular seals, each with supporting valves and piping or lines to supply pressurized operating fluid. Thus, a computer illustration of the pressure system with its different fluid control components is created on a computer in order to properly

test all of the different components to the appropriate pressure and to help avoid costly duplicative testing. Figure 15 from the '143 patent is reproduced below and provides an example of such a schematic illustration to be displayed on a computer screen or printed. By way of example, circled in red are a pressurized pipe or conduit 1215, a pressurized annular space 1209 surrounding tubing 1208, and the closed annular BOP 1221.

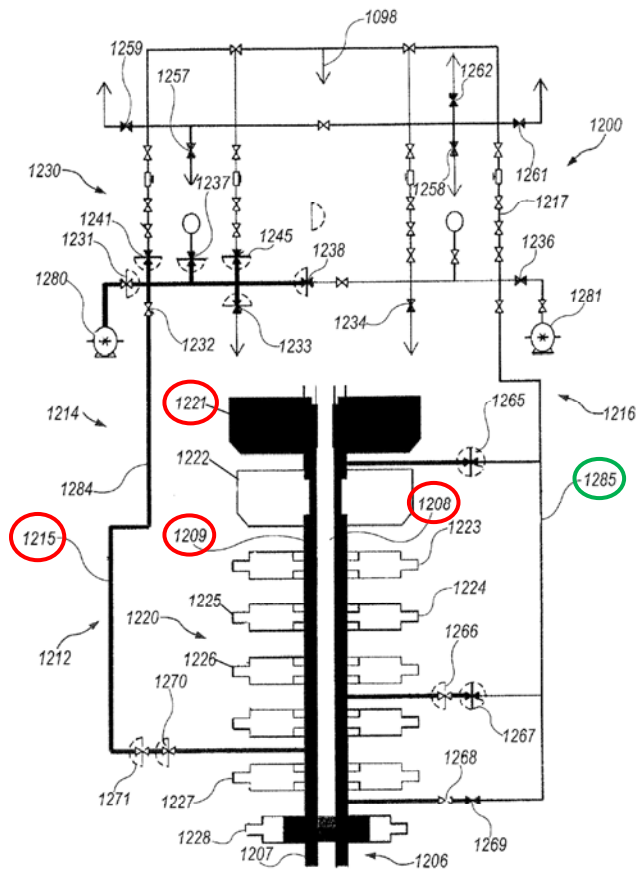


FIG. 15

16. In order to pressure test the entire BOP system, the different BOP rams and valves must be opened or closed and pressurized to successively isolate and test each component or group of components. This typically requires testing several different valve and ram configurations. For example, in the configuration of Figure 15 above, valve 1269 and BOP 1228 are both closed and will be tested under pressure, whereas line 1285 and downstream

components will not be tested. These different testing configurations are referred to as test “alignments.” A full system test may require several different testing configurations or alignments in order to properly test each fluid control component. Figure 19 from the ‘143 patent depicts five tests and confirms that each of the several valves and rams from the system will be tested by performing tests configured according to these five alignments.

Valve/ Ram	Side/ Size	Covered	BOP 1	BOP 2	BOP 3	BOP 4	BOP 5
A1	4.500	✓	✓				
BR1	No Pipe	✓			✓		
VR1	5.500	✓				✓	
VR2	7.000	✓		✓			
VR3	4.500	✓					✓
KH1	R	✓			✓		✓
V3	T	✓	✓	✓		✓	
V4	T	✓			✓		✓
V8	B	✓	✓	✓		✓	
V9	L	✓	✓	✓			
V9	R	✓					✓
V10	L	✓				✓	
V10	R	✓			✓		
V11	B	✓			✓		✓
V13	B	✓	✓	✓		✓	
V14	B	✓	✓	✓		✓	
V16	B	✓			✓		✓
V25	B	✓			✓		✓
V40	L	✓	✓				
V46	L	✓	✓	✓		✓	
V48	L	✓	✓	✓		✓	

**FIG. 19**

17. IPT Global devoted over three years of effort and significant research and development funds to designing, testing, and improving its patented SureTec<sup>®</sup> suite of digital pressure testing software. SureTec<sup>®</sup> was a huge success. IPT Global’s customers — including many of the major oil companies and operators — heaped praise on SureTec<sup>®</sup> for its ability to

develop optimized BOP test plans and thus drastically reduce the required testing time, often saving customers many millions of dollars that would otherwise be lost in added downtime required for inefficient test plans and wasted testing time.

18. In 2014, IPT Global demonstrated its SureTec<sup>®</sup> testing suite on a wellsite that was also using competing pressure testing software then offered by OTC. On information and belief, at the time, OTC's competing software lacked many of SureTec<sup>®</sup>'s advanced features, including its patented test planning and test schematic generation features. Mr. Harold "Stretch" Kuykendall was on the scene and observed the pressure testing and SureTec<sup>®</sup>'s advanced features.

19. On information and belief, Mr. Kuykendall advised personnel from OTC that SureTec<sup>®</sup>'s advanced features, including its patented test planning and test schematic generating features provided IPT Global a significant competitive advantage over OTC's less effective software. On information and belief, Mr. Kuykendall joined OTC to help it develop new software with added features to compete directly with IPT Global. On information and belief, Mr. Kuykendall brought with him test plans, reports, and documentation regarding SureTec<sup>®</sup> that IPT Global had earlier provided only to its customer.

20. On information and belief, OTC used the information and documentation gained from Mr. Kuykendall to design and develop OTC's competing suite of products referred to as "Greenlight," and particularly, its test planning and schematic generation component referred to as "Blueprint."

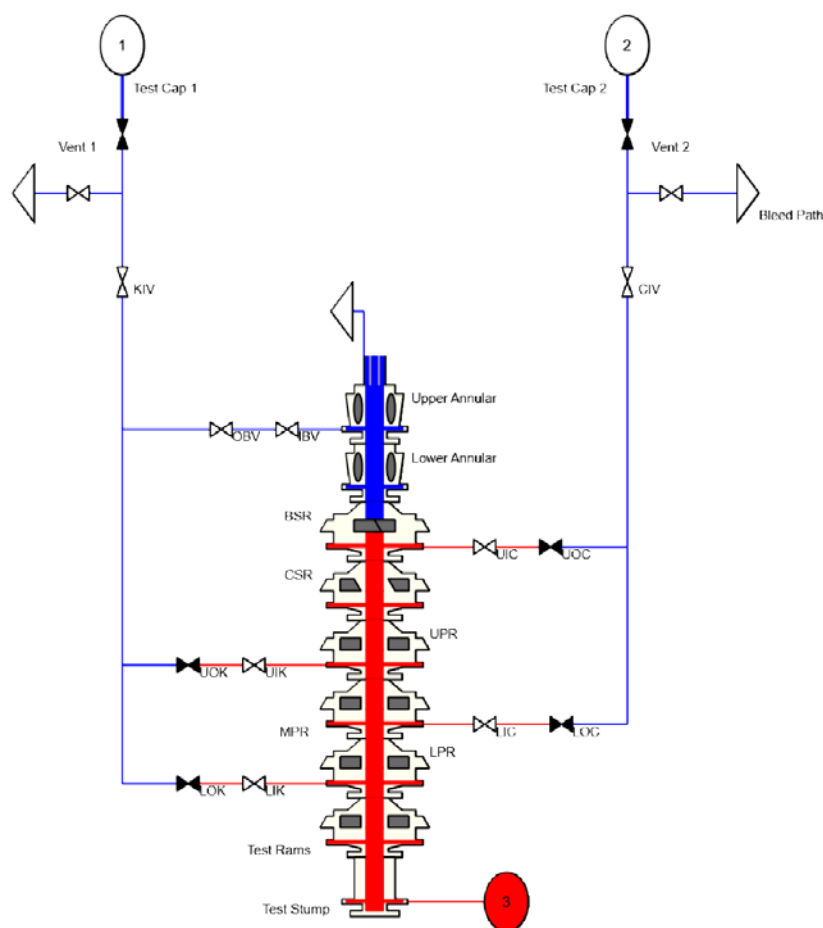
21. On information and belief, OTC also gained insight into the operation of SureTec<sup>®</sup> by hiring no less than five of IPT Global's managers and technical personnel who had significant knowledge of SureTec<sup>®</sup> gained while employed at IPT Global. On information and



belief, these IPT Global employees hired by OTC also gave OTC key information regarding IPT Global's customers, its pricing, and its marketing techniques used with the patented SureTec<sup>®</sup> suite of products.

22. On information and belief, the IPT Global employees who were hired by OTC also advised OTC that IPT Global had filed patent applications and/or been granted patents on the many innovative features of SureTec<sup>®</sup>, including the test planning and test schematic generating features then being copied by OTC. On information and belief, OTC thereby gained specific knowledge of the '143 patent.

23. In 2016, OTC released its copied "Blueprint" software used for generating schematic illustrations of pressure systems to be tested and for generating optimized test plans for efficiently testing the many different components of complex pressure systems. These schematic illustrations are output on a display screen, saved to electronic files, and/or printed on media for a permanent record of testing configurations. Like the schematic illustrations described and claimed by the '143 patent, OTC's illustrations generated by its Blueprint software component include symbols representative of the many different fluid control components of the pressure system to be tested, for example, valves, BOPs, and pipes or control lines. Such an illustration for one particular OTC test configuration or "alignment" is shown below:



**Fig. 1 OTC Blueprint**

24. Much like the system and methods described in the '143 patent, the OTC Blueprint software outputs a table to indicate whether each of the wellhead pressure control components will be tested. An example is shown below:

Tests 1 - 13			Tested?	1 - 7,000 psi	2 - 7,000 psi	3 - 7,000 psi	4 - 7,000 psi	5 - 7,000 psi	6 - 7,000 psi	7 - 7,000 psi	8 - 7,000 psi	9 - 7,000 psi	10 - 7,000 psi	11 - 7,000 psi	12 - 7,000 psi	13 - 10,000 psi
Components	Side	Required Pressure														
BSR	B	7,000 psi	✓	✓	✓	✓										
CIV	B	7,000 psi	✓			✓										
CIV	T	7,000 psi	✓				✓									
IBV	L	7,000 psi	✓			✓			✓							✓
IBV	R	7,000 psi	✓								✓					
KIV	B	7,000 psi	✓			✓										
KIV	T	7,000 psi	✓				✓									
LIC	L	7,000 psi	✓		✓							✓	✓	✓		
LIC	R	7,000 psi	✓													
LIK	L	7,000 psi	✓						✓							
LIK	R	7,000 psi	✓		✓					✓						
LOC	L	7,000 psi	✓	✓												
LOC	R	7,000 psi	✓					✓								
LOK	L	7,000 psi	✓					✓								
LOK	R	7,000 psi	✓	✓							✓					
LPR	B	7,000 psi	✓													✓
MPR	B	7,000 psi	✓													
OBV	L	7,000 psi	✓					✓				✓	✓	✓		
OBV	R	7,000 psi	✓							✓						
UIC	L	7,000 psi	✓		✓							✓				
UIC	R	7,000 psi	✓						✓							
UIK	L	7,000 psi	✓						✓							✓

**Fig. 2 OTC Blueprint**

25. OTC also provides software that it uses for collecting and displaying pressure testing data and results, which OTC refers to as the “OTC Greenlight” software. The OTC Greenlight software displays on a computer screen visual graphs of sensed pressure as a function of time, as well as a visual indicator indicating whether the alignment being tested has passed the pressure test then being performed (e.g., using a circular green light).

26. Like IPT Global’s patented systems and methods, the OTC Greenlight software uses the sensed pressure data sampled at successive time intervals to determine whether the pressure system configuration being tested will achieve a steady state pressure above the applicable pressure limit. Like IPT Global’s patented systems and methods, OTC’s determination is often made quicker than the full duration of testing time that would otherwise be required by previous manual testing methods.

27. An example of a pressure graph from OTC's Greenlight software is shown below. The test begins with a pressure of about 6,050 psi, and by the time 5:02:35, the pressure has dropped to 5,835 psi. At this time, the system is not yet able to determine whether the pressure will be maintained within the applicable limits, so it displays a yellow triangle and testing continues. However, by 5:03:20 the decreasing pressure, now 5,830 psi, has sufficiently settled to enable a determination that the system will maintain its pressure within the applicable limits. Thus, the system displays a green circle on the right to indicate that the test was considered passing and that this phase of testing may be terminated by pressing the "terminate now" button.



**Fig. 3 OTC Greenlight**



Fig. 4 OTC Greenlight

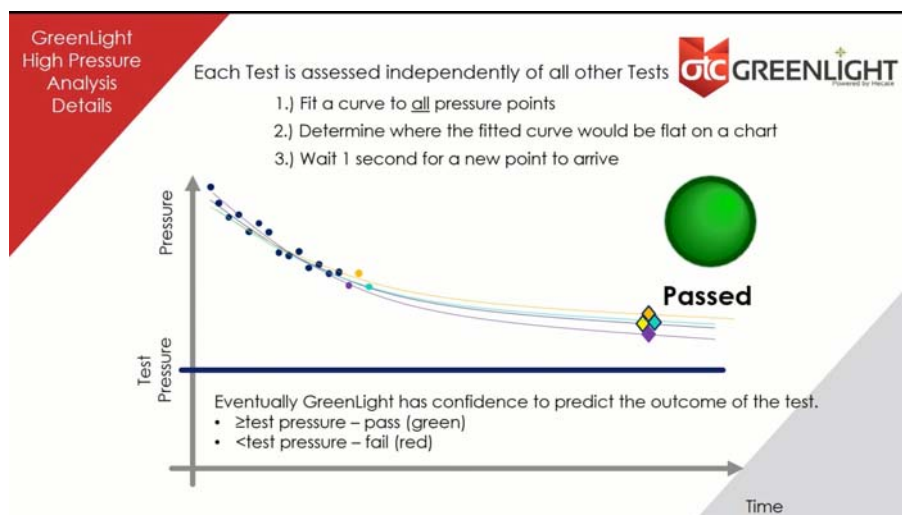
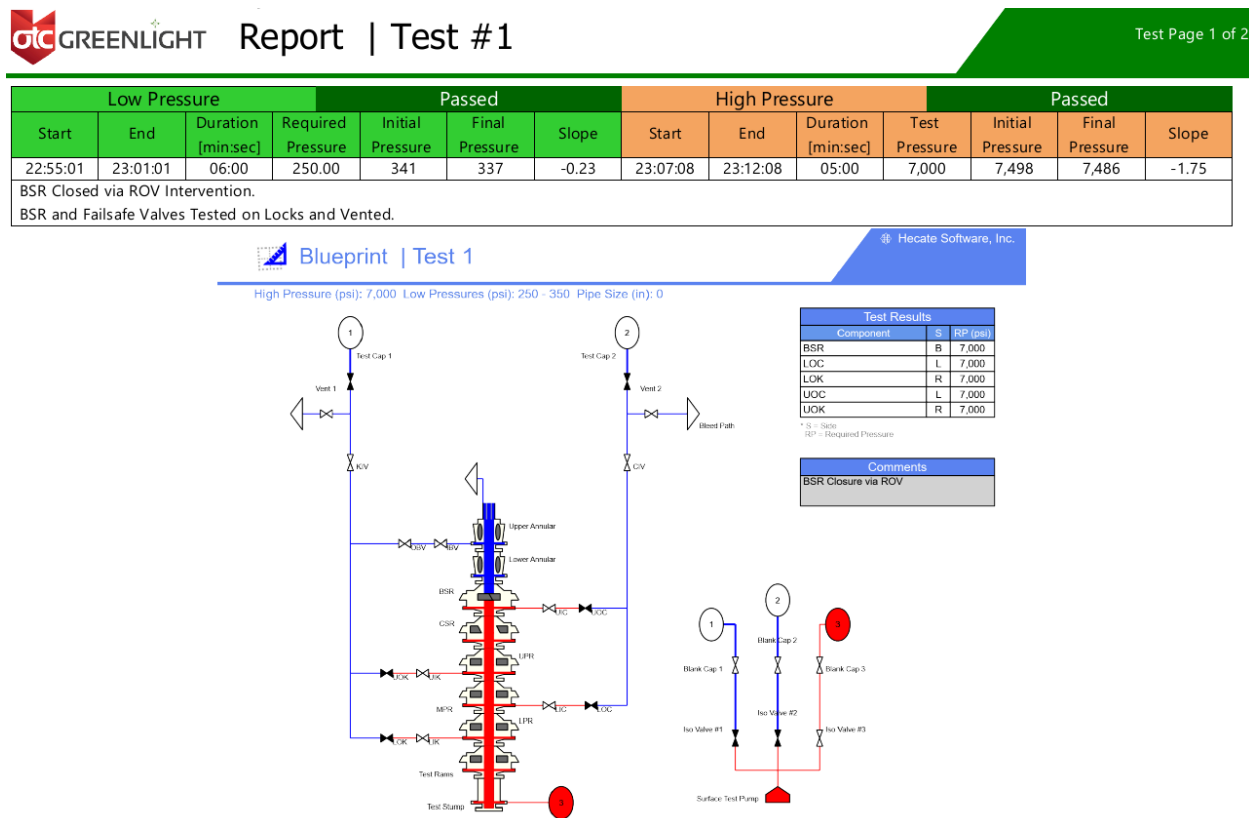


Fig. 5 OTC Greenlight

28. OTC's software suite also includes a "Leaflet" software application for generating reports of testing. These reports combine and tabulate the illustrations of the various test alignments, along with the corresponding test data and results (whether "passed" or

“failed”). The reports generated by the Leaflet software may be output as electronic files and may be printed and stored as a record of the pressure testing.



**Fig. 6 OTC Leaflet**

29. OTC performs pressure testing as a service for its customers using its Blueprint, Greenlight, and Leaflet software to infringe the ‘143 patent. OTC also provides its software to customers with instructions and support to operate the software so as to infringe the ‘143 patent.

## V. CLAIMS FOR RELIEF

### COUNT 1 PATENT INFRINGEMENT

30. Plaintiffs IPT Global and IPT hereby incorporate paragraphs 1–29 above as if fully set forth herein.

31. On November 8, 2011, inventors Charles M. Franklin and Richard A. Cully filed United States Patent Application Serial No. 13/291,895, entitled *Systems and Methods for Determining Leaks in a Complex System*. Pursuant to 35 U.S.C. § 119, this application claims and is entitled to priority on United States Patent Application Serial No. 12/833,216 filed on July 9, 2010, and on United States Provisional Patent Applications Serial No. 61/311,863 filed on March 9, 2010 and Serial No. 61/234,736 filed on August 18, 2009.

32. On December 8, 2015, Messrs. Franklin and Cully's 2011 application was duly and lawfully issued as the '143 patent by the United States Patent and Trademark Office. By written assignment from the inventors Messrs. Franklin and Cully, Plaintiff IPT owns all right, title, and interest in and to the '143 patent.

33. In 2011 and 2012, IPT granted an exclusive license to IPT Global with respect to the systems and methods described and claimed in the '143 patent. IPT Global has standing as a proper plaintiff because it is the exclusive licensee with the right to sublicense and enforce the '143 patent. IPT is a proper plaintiff as the assignee of the '143 patent with the right to assume any enforcement that is not pursued by IPT Global and the right to join in any suit for enforcement of the '143 patent.

34. The '143 patent includes 18 claims. Claims 1 and 11 are independent method claims directed to methods for testing the integrity of a pressure system. Claim 18 is an independent system claim directed to a leak detection system. Claims 2-10 and 11-17 are dependent method claims which depend from either claim 1 or claim 11.

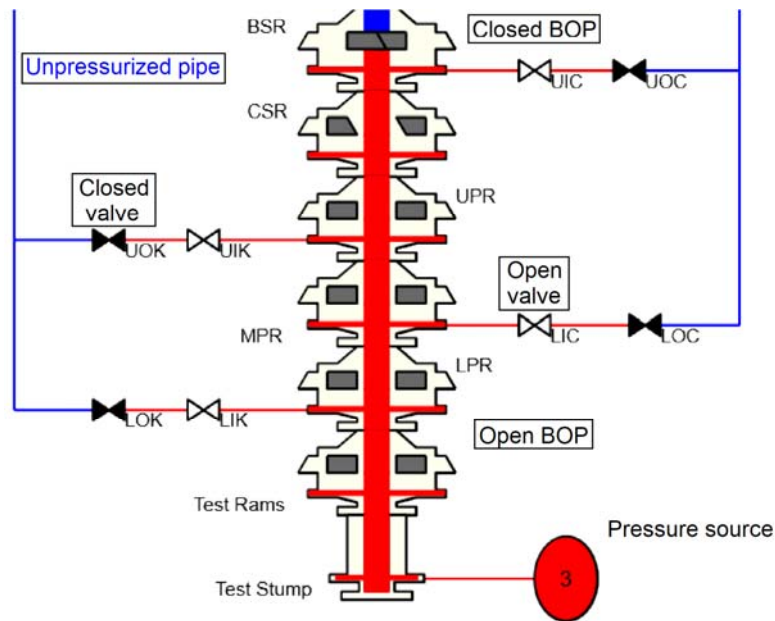
35. Defendant OTC infringes the '143 patent by making, using, offering for sale, and selling systems and methods which practice the claims of the '143 patent without authorization from IPT or IPT Global. By way of example, Defendant OTC infringes claim 1 of the '143

patent. Certain of OTC's representative and non-limiting systems, structures, and acts which infringe claim 1 of the '143 patent will now be described.

36. Claim 1 is directed to "[a] method for testing the integrity of a pressure system, said pressure system having a plurality of fluid control components, a plurality of fluid pathways defined by said fluid control components, and at least one pressure sensor in fluid communication with said plurality of fluid pathways." OTC practices this method by performing the recited method steps using its Blueprint, Greenlight, and/or Leaflet software to perform pressure testing on pressure systems, for example, BOP systems, that comprise fluid control components. These fluid control components include BOPs and valves, which are connected to a pressure source such as a fluid pump, and supply lines with a pressure sensor positioned to sense pressure in the system downstream from the pump and upstream from the tested component(s). The sensed pressure, such as 5,830 psi shown in Fig. 4 above, is displayed on a computer screen using the Greenlight software.

37. Claim 1 of the '143 patent further recites "forming, on an output device of a computer system, an illustration representative of said pressure system, said illustration including a plurality of fluid control symbols reflective of said plurality of fluid control components, said fluid control symbols reflecting at least one of an operating position and a test status of a fluid control component[.]" OTC practices this step by creating illustrations in its Blueprint software and by reproducing these illustrations in its Leaflet software reports. These Blueprint illustrations include symbols that reflect the operating position of fluid control components, such as open or closed valves and open or closed BOPs.





**Fig. 7 OTC Blueprint**

38. OTC's Leaflet reports include an indication of the test status of these fluid control components, such as "Passed" or "Failed," immediately adjacent to the corresponding alignment illustration and pressure graphs.

**OTC GREENLIGHT Report | Test #1**


Low Pressure				Passed			Hi	
Start	End	Duration [min:sec]	Required Pressure	Initial Pressure	Final Pressure	Slope	Start	Hi
22:55:01	23:01:01	06:00	250.00	341	337	-0.23	23:07:08	2.

BSR Closed via ROV Intervention.  
BSR and Failsafe Valves Tested on Locks and Vented.

[Blueprint | Test 1](#)

High Pressure (psi): 7,000 Low Pressures (psi): 250 - 350 Pipe Size (in): 0

**Fig. 8 OTC Leaflet**

 **Report** |

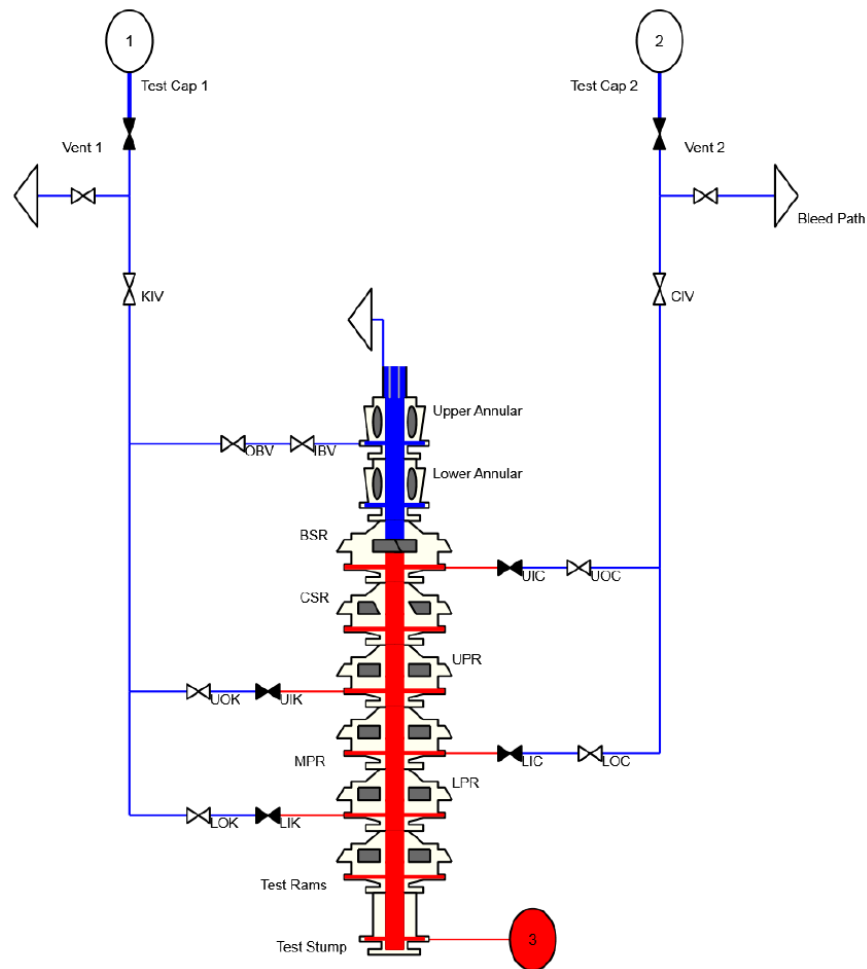
Low-Pressure						
Test #	Start	End	Duration [min:sec]	Initial Pressure	Final Pressure	Status
6a	17:50:31	17:56:31	06:00	313	203	Failed

Unknown Pressure Loss. Bleed to Zero. Grease Failsafe Valves.

**Fig. 9 OTC Leaflet**

39. Claim 1 of the ‘143 patent further recites “receiving, by the computer system, a selection of an operating position for a first plurality of fluid control symbols to define a first fluid pathway within said illustration[.]” OTC practices this step by receiving from a user selections for a particular pressure testing alignment using the OTC Blueprint software. The fluid pathway for pressurized fluid in a first alignment is shown in red in Fig. 7 above.

40. Claim 1 of the ‘143 patent further recites “receiving, by the computer system, a selection of an operating position for a second plurality of fluid control symbols to define a second fluid pathway within said illustration[.]” OTC practices this step by receiving from a user one or more additional testing alignments using the OTC Blueprint software. By way of example, the fluid pathway for pressurized fluid in such a second alignment is shown in red in the drawing below, which depicts the same pressure systems as was depicted the first alignment, but with alternative operating positions of the fluid control components.



**Fig. 10 OTC Blueprint**

41. In the drawing above, the second fluid pathway is defined by the closed valves LIK, UIK, VIC, and LIC, the closed blowout preventer labeled BSR, the interconnecting annular space above the test stump, and the pressure lines shown in red.

42. Claim 1 of the ‘143 patent further recites “receiving, by the computer system, a signal reflective of a pressure sensed by said pressure sensor[.]” OTC practices this step by sensing the pressure supplied by a pump and receiving the sensed pressure by a computer that is operating OTC’s Greenlight software.

43. Claim 1 of the '143 patent further recites “positioning a first plurality of fluid control components to form said first fluid pathway within said pressure system, said first fluid pathway configured to be individually pressurized and including said pressure sensor[.]” OTC practices this step by positioning the plurality of fluid control components shown in the first alignment in Figure 7 above to form the first fluid pathway shown therein in red. The fluid pathway is connected to a pump such as the pump labeled “Surface Test Pump” below. A pressure sensor is positioned in the first fluid pathway.

44. Claim 1 of the '143 patent further recites “pressurizing said first fluid pathway to a first test pressure, causing said pressure sensor to generate a signal reflective of a first pathway pressure[.]” OTC practices this step by operating the pump to pressurize the first fluid pathway shown below in red to a first test pressure, such as the initial pressure of about 6,050 psi, thereby causing the pressure sensor to generate a signal reflective of the first pathway pressure. The sensed pressure is output on a computer screen as shown by the downward sloping red line in the graph below.

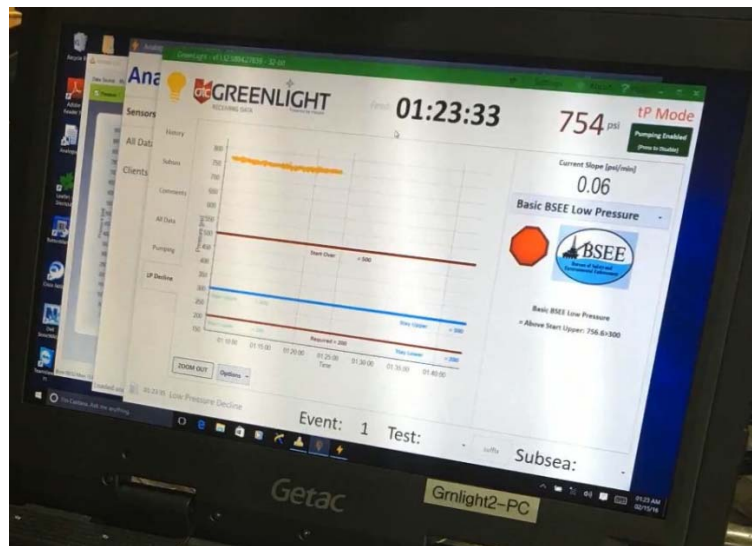


**Fig. 11 OTC Greenlight**

45. Claim 1 of the '143 patent further recites “receiving, by the computer system, said signal reflective of said first pathway pressure at time t1 and at time t2[.]” OTC practices this step by receiving the sensed pressure on a computer operating the OTC Greenlight software. In the portion of the pressure graph shown above, the pressure is received by the computer system and displayed on screen at multiples times starting at about 04:50:00 and ending at about 04:56:00.

46. Claim 1 of the '143 patent further recites “comparing, by the computer system, said first pathway pressure at time t1 and at time t2 and calculating, by the computer system, a first test status of said first fluid pathway from a difference in said first pathway pressure from time t1 to time t2[.]” OTC practices this step in its Greenlight software by at least calculating a slope of the pressure over time, i.e., the difference in pressure divided by the difference in time, and by determining whether the steady state pressure of the test alignment will remain within the applicable limits. The test status is either passed, failed, or inconclusive.

47. Claim 1 of the '143 patent further recites “displaying on the output device said first test status[.]” OTC practices this step by the OTC Greenlight software displaying a yellow visual symbol on the computer screen to indicate that testing is ongoing and is still inconclusive, a green circle to indicate that testing has passed, and a red octagon to indicate that testing has failed. Yellow and green symbols are shown on the right side of the pressure graphs above. The red octagon symbol is shown on the right side of the graph below.



**Fig. 12 OTC Greenlight**

48. OTC also practices this step by creating and displaying or printing the report of testing using its Leaflet software, which combines tabular test data (pressure and time), test status (passed, failed, or inconclusive), and the corresponding alignment illustrations.

49. Claim 1 of the ‘143 patent further recites “positioning a second plurality of fluid control components to form said second fluid pathway within said pressure system, said second fluid pathway configured to be individually pressurized and including said pressure sensor[.]” OTC practices this step by positioning a second plurality of fluid control components in the positions shown in the second alignment illustration shown in Fig. 10 above to form the second fluid pathway shown therein in red. This fluid pathway is also connected to the pump and a pressure sensor. In this example, valves LIK, UIK, UIC, and LIC are closed and valves LOK, UOK, UOC, and LOC are opened.

50. Claim 1 of the ‘143 patent further recites “pressurizing said second fluid pathway to a second test pressure, causing said pressure sensor to generate a signal reflective of a second pathway pressure[.]” OTC practices this step by operating the pump to pressurize the second

fluid pathway to an initial test pressure, thereby causing the pressure sensor to generate a signal reflective of the second pathway pressure.

51. Claim 1 of the '143 patent further recites "receiving, by the computer system, said signal reflective of said second pathway pressure at time t3 and at time t4[.]" OTC practices this step by sensing the pressure supplied by the pump and receiving the sensed pressure by a computer that is operating OTC's Greenlight software. For example, in Fig. 4 above, a pressure of about 5,950 psi is sensed at the time 04:54:00, and a pressure of about 5,920 psi is sensed at the time 04:56:00.

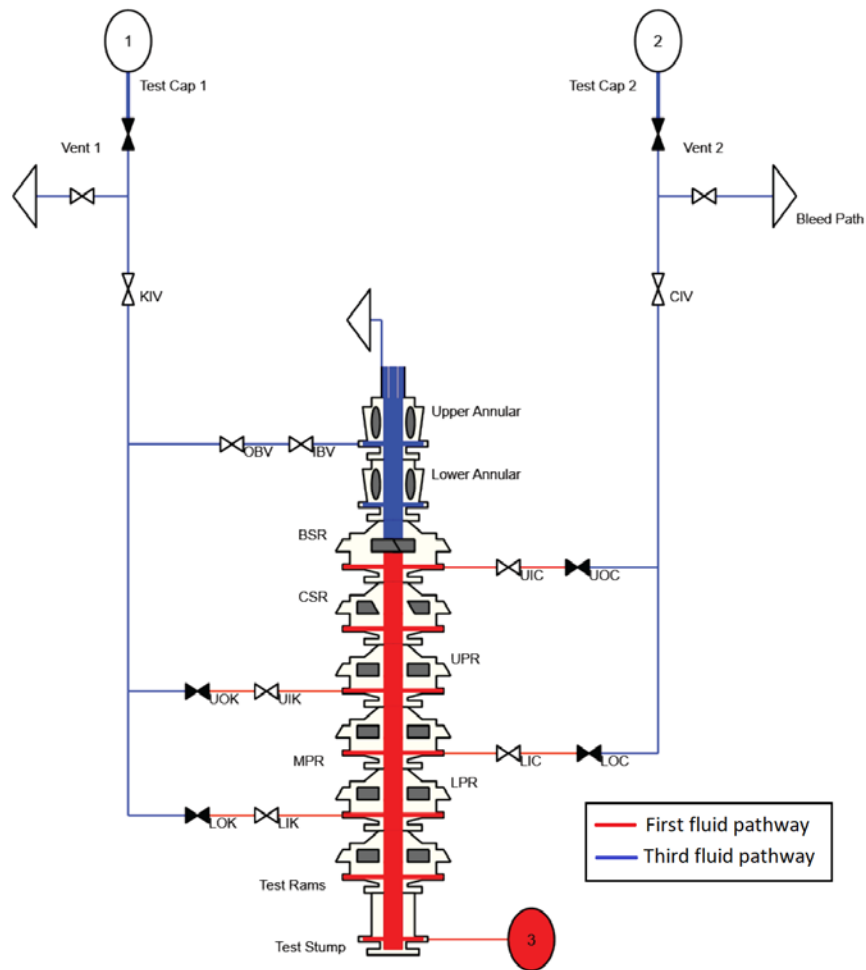
52. Claim 1 of the '143 patent further recites "comparing, by the computer system, said second pathway pressure at time t3 and at time t4 and calculating, by the computer system, a second test status for said second fluid pathway from a difference in said second pathway pressure from time t3 to time t4[.]" OTC practices this step in its Greenlight software by at least calculating a "slope" of the pressure over time, i.e., the difference in pressure divided by the difference in time, and by predicting whether the steady state pressure of the second pathway pressure will remain within the applicable limits. The test status is either passed, failed, or inconclusive. As shown in Fig. 4 above, at times t3 and t4 after 04:56:00, the OTC Greenlight software calculated a slope of -8.26 psi per minute. Based on this slope, the system predicted that the steady state pressure would remain within the applicable limits and displayed a green light to indicate that the test passed.

53. Claim 1 of the '143 patent further recites "displaying on the output device said second test status[.]" OTC practices this step by the OTC Greenlight software displaying a yellow visual symbol on the computer screen to indicate that testing of the second fluid pathway is ongoing and still inconclusive, a green circle to indicate that testing has passed, and a red

octagon to indicate that testing has failed. OTC also practices this step by creating and displaying or printing the report of testing each of the test alignments using its Leaflet software, which combines tabular test data (pressure and time), test status (passed, failed, or inconclusive), and the corresponding alignment illustrations.

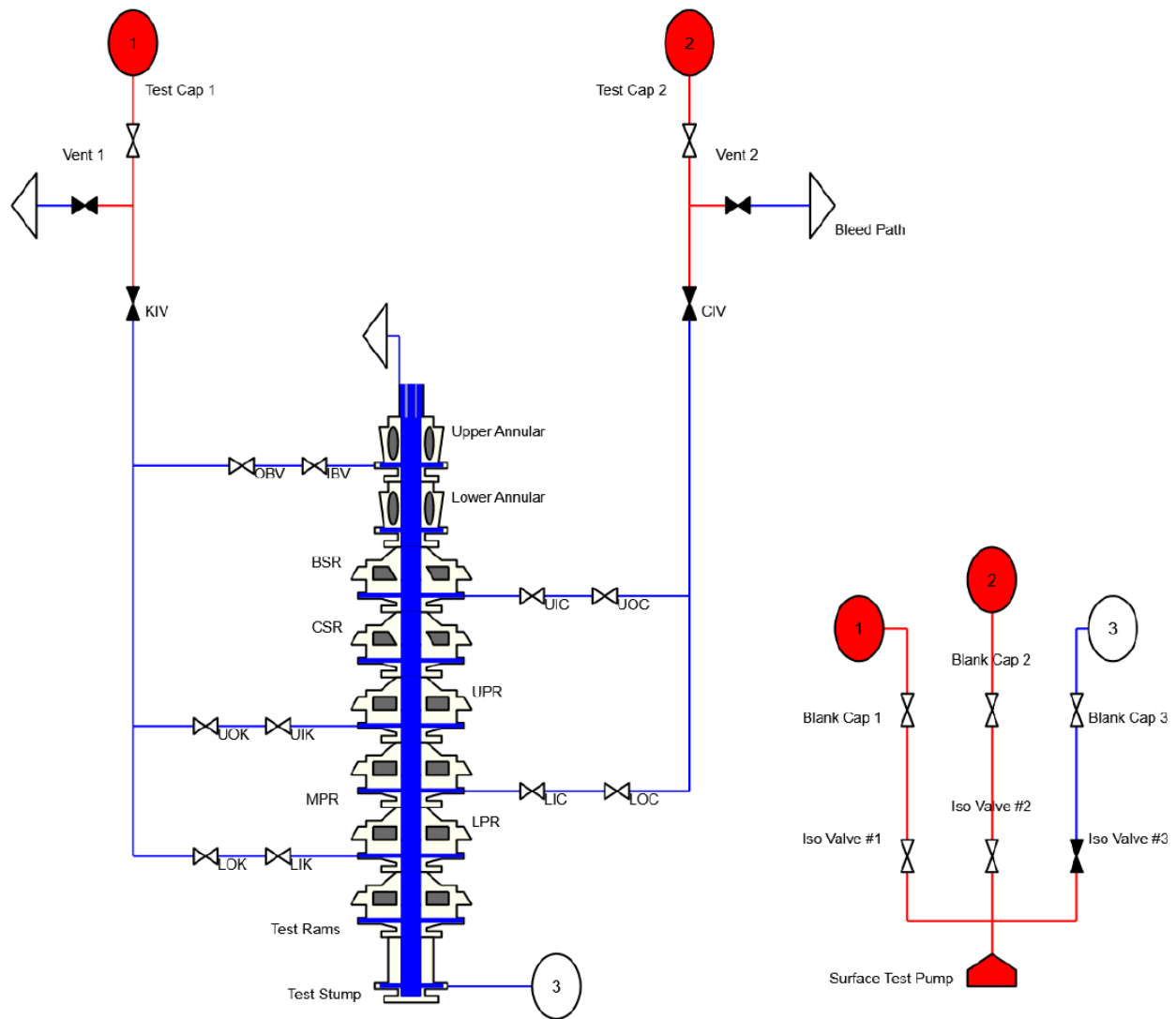
54. Claim 1 of the '143 patent further recites "positioning a third plurality of fluid control components to form a third fluid pathway within said pressure system, said third fluid pathway being configured to receive said pressurized fluid if said first fluid pathway fails to maintain said first test pressure[.]" OTC practices this step by positioning the fluid control components depicted below so as to provide a third fluid pathway shown in blue, which leads upward from valves LOK and UOK on the left side, and valves LOC and UOC on the right side. This pathway includes valves KIV and CIV, which are both opened so that, if valve LOK or UOK fails during testing of the first alignment, the pressurized fluid then flows into the third fluid pathway (depicted in blue) and toward vent 1. Likewise, if opposing valve LOC or valve UOC fails during testing of alignment 1, then the pressurized fluid flows into the third fluid pathway (depicted in blue) and toward vent 2.





**Fig. 13 OTC Blueprint**

55. In a second example illustrated in Figure 14 shown below (reproduced from the OTC Blueprint software), several third fluid pathways are formed on both the left side and the right side of the BOP stack. For example, on the right side of the illustration, a third fluid pathway extends from the Vent 2 valve, through the blue tubular conduit, and out of the right side bleed path. Another third fluid pathway is formed on the right side extending below closed valve CIV, through the open valves UOC, UIC, LOC, and LIC, upward through the BOP annulus, and out through the upper BOP annular (labeled with a triangular symbol to indicate a bleed path).



**Fig. 14 OTC Blueprint**

56. Claim 1 of the ‘143 patent lastly recites “venting said third fluid pathway to atmosphere.” OTC practices this step by including a bleed path on each of the foregoing third fluid pathways.

57. Defendant OTC or its agents or employees perform each of the foregoing steps recited by claim 1 of the ‘143 patent. Alternatively, for any steps of claim 1 that are performed by a third party, such as third party software licensees or third party rig personal (or such third party’s agents), OTC conditions participation in pressure testing or any licensed use of its

Blueprint, Greenlight, and/or Leaflet software, or the receipt of the benefit of such pressure testing or software use, upon performance of such steps by such third party. For any such steps of claim 1 that are performed by a third party or its agents, OTC establishes the manner or timing of the performance of such step.

58. Defendant OTC's acts constitute direct infringement of the '143 patent under 35 U.S.C. § 271(a).

59. Upon information and belief, Defendant OTC had knowledge of the '143 patent and nonetheless continued its infringement despite this knowledge. Defendant OTC's infringement of the '143 patent has been, and continues to be knowing, intentional, and willful.

60. Defendant OTC has actively induced infringement of the '143 patent under 35 U.S.C. § 271(b). OTC has actively induced direct infringement by others within the United States, including rig owners or operators and their agents, by selling its Blueprint, Greenlight, and Leaflet software with explicit instructions to perform the methods, and make and use the systems claimed by the '143 patent.

61. Defendant OTC has contributorily infringed the '143 by offering to sell and selling its Blueprint, Greenlight, and Leaflet Software within the United States because such software is used in practicing the patented methods and constitutes a material part of the claimed system. Upon information and belief, Defendant OTC had knowledge that such software was especially made or especially adapted for use in an infringement of the '143 patent, and not a staple article or commodity of commerce suitable for a substantial noninfringing use.

62. Defendant OTC's acts of infringement have caused and will continue to cause Plaintiffs IPT Global and IPT damages for which Plaintiffs are entitled to compensation and enhanced damages pursuant to 35 U.S.C. § 284.

63. Defendant OTC's acts of infringement have caused and will continue to cause Plaintiffs IPT Global and IPT immediate and irreparable harm unless such infringing activities are preliminarily and permanently enjoined by this Court pursuant to 35 U.S.C. § 283.

64. This case is exceptional and, therefore, Plaintiffs IPT Global and IPT are entitled to an award of their attorney fees pursuant to 35 U.S.C. § 285.

## **VI. JURY DEMAND**

65. Plaintiffs IPT Global and IPT hereby demand a trial by jury of any and all issues triable of right by a jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

## **PRAYER**

Plaintiffs IPT Global and IPT request a judgment from this Court including the following:

- a. a finding that Defendant OTC directly infringes the '143 patent under 35 U.S.C. § 271(a), induces infringement under 35 U.S.C. § 271(b), and contributorily infringes the '143 patent under 35 U.S.C. § 271(c);
- b. a finding that Defendant's infringement was willful;
- c. an order preliminarily and permanently enjoining Defendant, and all those in active concert or participation with it, from infringing the '143 patent, in accordance with 35 U.S.C. § 283;

d. an order awarding Plaintiffs their actual damages and enhanced damages in an amount to be determined at trial, but in no event less than a reasonable royalty pursuant to 35 U.S.C. § 284;

e. an order awarding Plaintiffs their costs and attorney fees in accordance with 15 U.S.C. § 285; and

f. an order awarding Plaintiffs all such other and further relief as is available, at law or in equity, that this Court deems just, equitable, and proper under the circumstances.

Respectfully submitted on this 27<sup>th</sup> day of August, 2019,

**CONLEY ROSE, P.C.**

By: /s/Thomas L. Warden

**Thomas L. Warden**

Texas State Bar No. 24004174

Southern District Bar No. 22342

twarden@conleyrose.com

**Nick P. Patel**

Texas State Bar No. 24076610

Southern District Bar No. 1156204

npatel@conleyrose.com

**CONLEY ROSE, P.C.**

575 North Dairy Ashford Road, Suite 1102

Houston, Texas 77079

Telephone: (713) 238-8000

Facsimile: (713) 238-8008

**BOYARMILLER**

By: /s/Chris Hanslik

Chris Hanslik

Texas State Bar No. 00793895

Southern District Bar No. 19249

chanslik@boyarmiller.com

Lauren Black

Texas State Bar No. 24097767

Southern District Bar No. 3039945

lblack@boyarmiller.com

Kirby Grove

2925 Richmond Avenue, 14th Floor

Houston, Texas 77098

Telephone: (713) 850-7766

Facsimile: (713) 552-1758

**ATTORNEYS FOR PLAINTIFFS**

**IPT GLOBAL, LLC AND**

**INNOVATIVE PRESSURE TESTING, LLC**